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RACING WINDGENERATORS

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This new-design wind-generator is under testing since one year in collaboration with MACIF Design Team with the goal to achieve **full autonomy** on their giant trimaran.

We applied our knowledge from well-proven hydrogenerator technology to transpose its efficiency to wind generation. The result is a powerful and lightweight windgenerator. The prototype installed on MACIF trimaran showed great durability during *François Gabart's* solo-round-the-world record.

Compared to conventionnal wind-generators **this new design offers unique advantages for «racing» use :**

- **High stability in turbulences and waves**
- **Waterproof**
- **Ultra light thanks to brushless alternator technology**
- **Storm mode to operate in 30-50 knots range**
- **Aerodynamic design : unperceivable drag, not affecting boat speed**
- **120W production (10A in 12Vcc) at 20 knots**

+ high stability : due to downwind design (= propeller at the rear), the turbine is stable by construction and do not need a stabilyzer or a tail fin. It follows the stream just as our hydrogenerators follow the waterflow and produces a very stable output.

+ high performance : thanks to this stability, the «real life» net power is well in agreement with laboratory data.

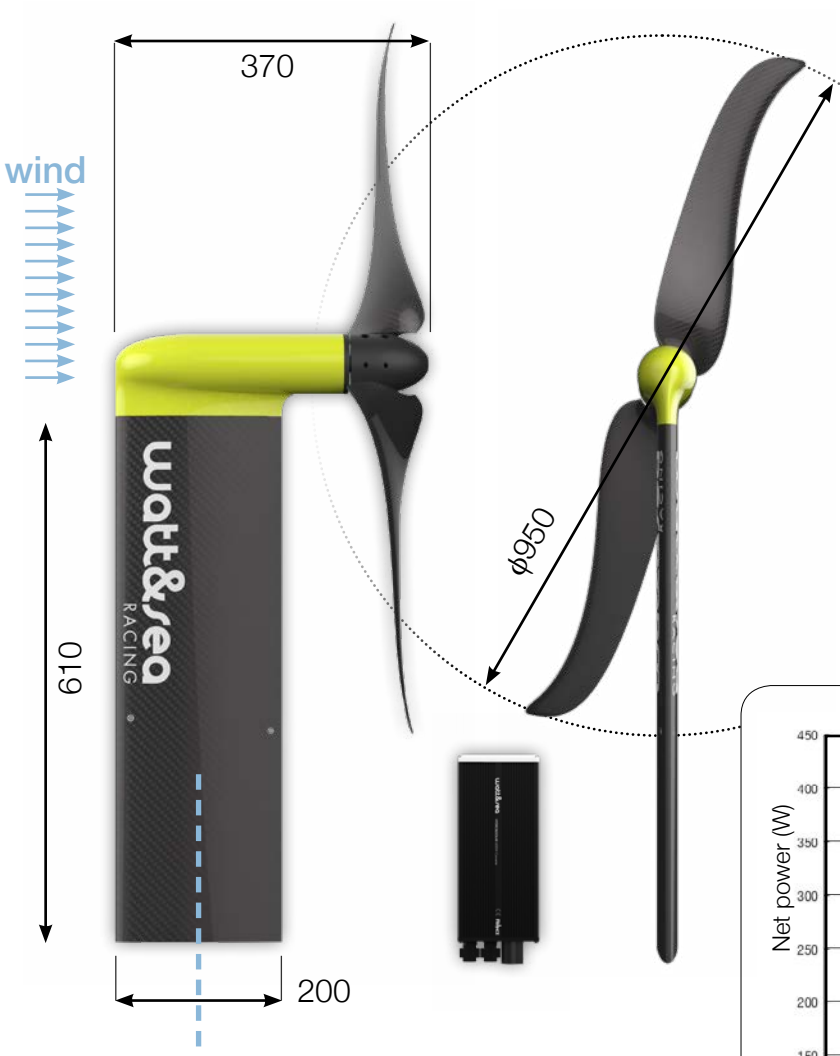
+ waterproof : oil-lubricated alternator with hi-tech seals

+ high wind range : «storm mode» selectable on the converter to withstand winds up to 50 knots and have power in any conditions.

+ low drag : blades have been specially designed to achieve the lowest drag possible and ensure quiet working.

+ safer : on sailing multihulls the blades are always turned to the back so that the turbine is easy to handle from the leg.

DIMENSIONS
(mm)



suggested pivot location
(the windgenerator is provided without pivot and sliping contacts)

TECHNICAL SPECIFICATIONS

Start-up wind speed*	17 knots
Working wind range	13-35 knots
Power at 20 knots	120 W
Power at 25 knots	250 W
Power at 30 knots	450 W
Max wind in classic mode	35 knots
Max wind in storm mode	55 knots
Output	12/24V auto 48V optionnal
Blade Material	pre-preg carbon
Wing Material	pre-preg carbon or aluminium
Generator weight	5.2 kg / 6.2 kg
Converter weight	1.5 kg

(*) minimum speed to overcome seals frictionnal torque

POWER CURVES